



Natural Heritage &
Endangered Species
Program

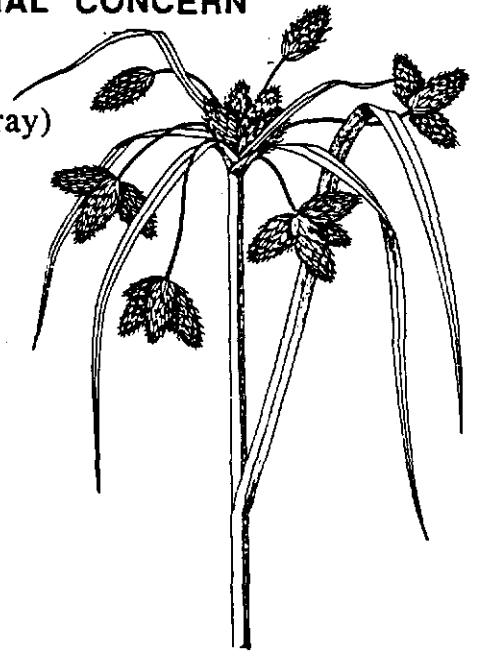
Commonwealth of Massachusetts
Division of Fisheries & Wildlife
Route 135
Westborough, MA 01581
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MASSACHUSETTS PLANTS OF SPECIAL CONCERN

RIVER BULRUSH
(*Scirpus fluviatilis* <Torr.> Gray)

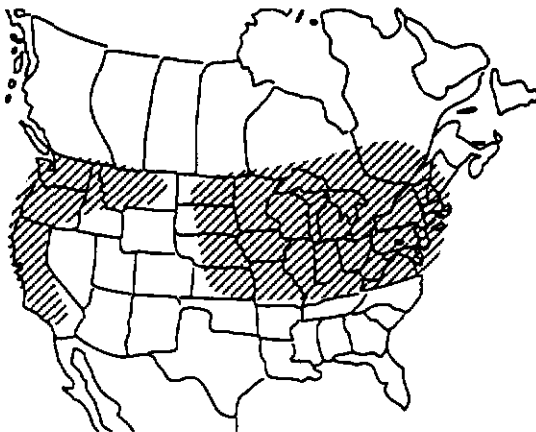
Description

The River Bulrush, a grasslike perennial in the Sedge family (Cyperaceae), has a stout, leafy triangular stem, or culm (a specialized stem of sedges, grasses, and rushes), and long-tapering, pale green leaves. The culm rises 0.6-1.5 m (2 - 5 ft.) from an elongate rhizome (an underground, horizontal stem), and is leafy nearly to its terminus. The 6-16 mm (6/25 - 16/25 in.) wide leaf blades are elongate and have leathery-textured, or coriaceous, sheaths (portions of the leaves that envelop the stem). Each leaf-sheath orifice is convex.

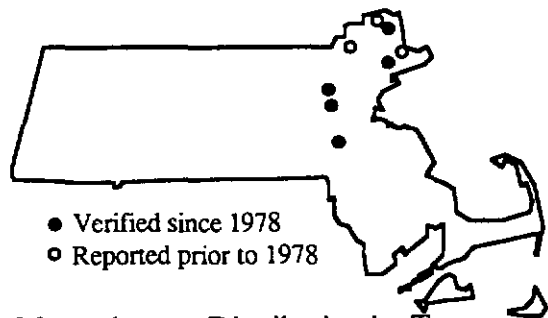


Tiner, R. W. Coastal Wetland Plants of the Northeastern United States. University of Massachusetts Press, 1987.

The reduced flowers and bracts are arranged in about 10-40 terminal spikes, all of which can be sessile (stalkless). However, more commonly, several, slender, drooping rays surround a central cluster. Individual spikes are ovoid to fusiform (spindle-shaped), 12-25 mm (1/2-1 in.) long,



Documented Range of
River Bulrush



Massachusetts Distribution by Town

and brown. Three to five bracts subtend the terminal cluster of spikes. River Bulrush's fruits are 3-5 mm (3/25 - 5/25 in.) long, three-sided achenes (a type of dry, one-seeded fruit). Fruits mature from early August to late September.

Range

The documented range of *S. fluviatilis* extends widely across the North American continent, from Quebec and N. Dakota, south to Virginia, Indiana, Missouri, and Kansas, and from Montana to Washington and California.

Similar Species

S. fluviatilis could be confused with the Salt Marsh Bulrush (*Scirpus maritimus* L.). However, unlike *S. maritimus*, River Bulrush has a convex leaf-sheath orifice. Furthermore, the Salt Marsh Bulrush is found in fresh, saline, or alkaline swamps and marshes, while River Bulrush is found only in shallow fresh water, especially on the banks of rivers.

Habitat in Massachusetts

In general, River Bulrush grows in shallow freshwater, including inland and tidal freshwater marshes and the shallow water of lakes, ponds, and riverbanks. The River Bulrush's habitats in Massachusetts include several floodplain marshes, a river floodplain meadow, and a boggy, tidal river flat. Associated species include Reed Canary Grass (*Phalaris arundinacea* L.), Common Cat-tail (*Typha latifolia* L.), Softstem Bulrush (*Scirpus validus* Vahl), and Wool-grass (*S. cyperinus* <L.> Kunth).

Population Status

River Bulrush is presently listed as a species of "Special Concern" in Massachusetts. Although a "Special Concern" species is not currently endangered or threatened in the state, it is rare and may become threatened due to a current decline in population, small numbers of the species, or limited habitat. There are five current stations (relocated or discovered since 1978) and three historical stations (unverified since 1978)--all in eastern Massachusetts. One additional, questionable historical site may have been in the Connecticut River Valley, however. Threats to the species include habitat disturbance that enables the non-native Purple Loosestrife (*Lythrum salicaria* L) to become established and occupy space that would otherwise be available to River Bulrush. River Bulrush is also considered rare in Kentucky, Pennsylvania, and Virginia.